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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/609,322

06/26/2003

Narayanan Sundararajan

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7346

7278

7590

10/30/2007

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EXAMINER

TENTONI, LEO B

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

10/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/609,322	SUNDARARAJAN, NARAYANAN	
	Examiner	Art Unit	
	Leo B. Tentoni	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-10,12-15,17,19,23-25 and 34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 and 10 is/are allowed.
- 6) ☒ Claim(s) 1-4,13-15,17,19,24,25 and 34 is/are rejected.
- 7) ☒ Claim(s) 6-8, 12 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4, 13-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beebe et al (U.S. Patent 6,488,872 B1).

Beebe et al (see the entire document, in particular, col. 3, lines 44-55; col. 4, lines 52-61; col. 7, line 55 to col. 8, line 7; col. 8, line 66 to col. 9, line 35; col. 10, line 5 to col. 12, line 52; col. 28, lines 36-63; col. 30, lines 27-65; claims 1, 9 and 10) teaches a process of making a structure as claimed, including a solidifiable fluid which contains a binding material, except that Beebe et al does not explicitly that the structure is a biocompatible coating, an internal divider wall or a pillar. However, this would have been obvious to one of ordinary skill in the art at the time the invention was made in the process of Beebe et al principally in order to manufacture a

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microfabricated device for detecting chemical or physical changes, or for detecting agents.

3. Claims 19, 24, 25 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beebe et al (U.S. Patent 6,488,872 B1) as applied to claims 1-4, 13-15 and 17 above, and further in view of Schneider et al (U.S. Patent Application Publication 2003/0083401 A1).

Schneider et al (see the entire document, in particular, paragraph [0055]) teaches a process of making a structure including the use of a solidifiable fluid containing nanoparticles, and such would have been obvious to one of ordinary skill in the art at the time the invention was made in the process of Beebe et al in view of Schneider et al principally in order to manufacture a structure having improved properties from the use of nanoparticles.

Allowable Subject Matter

4. Claims 9 and 10 are allowable over the prior art references presently of record.

5. Claims 6-8, 12 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Response to Arguments

6. Applicant's arguments filed on 24 August 2007 have been fully considered but they are not persuasive.

7. Applicant argues (page 7, last paragraph to page 8, first paragraph) that Beebe et al does not teach or suggest the formation of a coating, internal divider wall or pillar which is attached to the microfluidic channel. Examiner responds that this argument is not commensurate in scope with the instant claims principally because independent claims 1 and 19 do not positively recite that the formed structure is attached to the microfluidic channel in the body of the claims (compare independent claims 1 and 19 with independent claim 9, which does recite this feature in the body of the claim, and claim 9 is allowable over the prior art references presently of record; note also dependent claims 6 and 23, which also recite this feature, and have been objected to).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

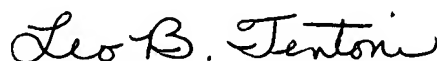
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo B. Tentoni whose telephone number is (571) 272-1209. The examiner can normally be reached on Monday - Friday (6:30 A.M. - 3:00 P.M.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina A. Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Leo B. Tentoni
Primary Examiner
Art Unit 1791

lbt